DONE = Green(do not make green until changed and checked in EIS) **Need to Discuss with FTA = Yellow** **Need further DTS Discussion = Blue**

FTA Comments on ADEIS, Honolulu High Capacity Transit Corridor Project
September 18, 2008

Key	No.	Location	COMMENT	Response
X	1	General – Alternative Analysis	Alternatives Analysis This project has a potential for litigation. It is important that the environmental record accurately reflect the required NEPA process. As noted by the CEQ, the alternatives analysis section of the DEIS is the heart of the environmental impact statement. It should "…sharply [define] the issues and [provide] a clear basis for choice among options by the decision-maker and the public." (40 CFR 1502.14) Alternatives eliminated from further treatment should be briefly discussed in the DEIS including the reasons for their having been eliminated. Several alternatives for the travel corridor were evaluated in the Honolulu High-Capacity Transit Corridor Project Alternatives Analysis Report (2006) including a TSM alternative. As a result of the AA, the Honolulu City Council selected a fixed guideway transit LPA. Under ordinary circumstances, limiting the discussion of alternatives and environmental scrutiny in the DEIS to the No-build alternative and three fixed guideway transit alternatives could be seen as meeting the criteria of "incorporating alternatives by reference" as described in 23 CFR 771.123(c). FTA believes that in the case of a mega-project with a potential for litigation, an appropriate course would be to identify an environmentally preferable alternative as required by 40 CFR 1505.2(b). The alternatives currently under review may not meet this test. The identification of an environmentally preferable alternative is not required until an environmental decision is made. Please revise the discussion in the Preface, Executive Summary and Alternatives Considered sections with the goal in mind of identifying an environmentally preferable alternative. Presumably, the TSM alternative discarded in the 2006 AA would be the alternative with the smallest environmental footprint. Review the earlier environmental documentation for the TSM. If the TSM can meet project purpose and need, elevate the discussion of the TSM in these introductory chapters. Discuss the TSM in the fashion of environmental screening to determine if it is the alternative that will cause the least damage to the biological and physical environment. It is important that the document identify the environmentally preferable alternative.	The TSM Alternative failed to meet Purpose and Need in the Alternatives Analysis. The No Build Alternative is equal in consideration to the TSM as environmentally preferable. In some elements the Build Alternatives are preferable; therefore, identifying consequence of all alternatives as preferable is is being being added in text and call-out box to Chapter 4: As required by Code of Federal Regulations Title 40 Part 1505.2(b), both the No Build and Build Alternatives are considered to be environmentally preferable, depending on the factors considered. The No Build Alternative would best protect historic and cultural resources, while the Build Alternatives would cause the least damage to the biological and physical environment and best preserve natural resources because they would result in reduced transportation energy consumption, air pollution, and water pollution. Considerations for the Environmentally Preferable Alternatives Considered Resource / No Build Alternative / Build Alternatives Biological Environment / / X Physical Environment / / X Historic resources / X / Cultural Resources / X / Natural Resources / / X X= Alternative causes least damage, or best protects, preserves, or enhances resource.
X	2	General-Project Phasing	According to the ADEIS narrative and Figure 2-42, DDTSTS wishes to advance the project in five phases. The first two phases would be constructed in a largely uninhabited area from 'Ewa to Pearl City. This appears to meet the project purpose and need and more specifically the goal to "improve access to planned development." (p. 1-20). FTA notes that project construction on Phase 1 is to begin in 2009, and Phase 2 will not be completed until 2014. With the completion of Phase 2 project ridership and user benefits will apparently be negligible, and it is not until scheduled completion of the 3rd phase of the project in 2017 from Pearl Highlands to Aloha Stadium that DTS can expect reasonable ridership. While the study corridor (Ewa to Ala Moana Center) contains approximately 50 activity centers, fewer than one-half dozen activity centers (see Figure 1-4 Activity Centers) are contained in the first two phases. Moreover, Figure 4.2 (p. 4-11) shows that future land use in the area of the three western-most stations is planned as low-density residential – hardly supportive of an elevated LRT. Based upon Figure 1-6, Employment Distribution for Oahu, there are currently around 20,000 jobs in the Phases 1 & 2 area, excluding Pearl City. Every individual employment district in Phases 3-5 either approximates or greatly exceeds all of the employment in the four employment districts of Phases 1 and 2. Projected 2030 employment in these sectors is not projected to be significantly greater in these areas.	Project Phasing Section revised (Pg 2-36 and 2-37) to: ***Project Phasing*** The Locally Preferred Alternative adopted by the City Council identified a fixed guideway transit system between Kapolei and UH Mānoa with a branch line to Waikīkī. The Build Alternatives in this Draft EIS would begin to implement the Locally Preferred Alternative. The Project would begin near the planned UH West O'ahu campus and extend to Ala Moana Center. This is the portion of the Locally Preferred Alternative that can be constructed with anticipated funding. The remainder of the Locally Preferred Alternative, referred to in this Draft EIS as "planned extensions," would be constructed once additional funding is secured. The Project provides logical termini at East Kapolei and Ala Moana Center because it connects two locations that may be easily accessed with buses to connect to areas beyond the Project. Kapolei has been designated as O'ahu's "second city" and government offices have opened there. Kapolei is a logical Wai'anae terminus because both population and employment are forecasted to grow by approximately 400 percent. The Wai'anae terminus is near the UH West O'ahu campus, the Salvation Army Kroc Center, and development in Ho'opili, all of which are planned to open between 2009 and 2012. Ala Moana Center is the logical Koko Head terminus because it is O'ahu's largest shopping center and currently serves as a major transit hub with more than 2,000

			Note that in the Daily Transit Trips summary (p. 1-11), the highest concentrations of transit dependant households are contained in the corridor's eastern portion of Phase 4 and all of Phase 5 – the very last to be served by the proposed project are those that are most in need of equity considerations. However, Phases 1, 2 and 3 will feature a total of four park-and-ride facilities that, "…would have the highest demand of people driving to access the fixed guideway system." (p.3-35) So, Phases 1-3 would serve highest income (Table 4-8), lowest ridership areas first, leaving areas with the highest concentration of households with no vehicles (Fig. 4-15) to be served at project completion. One of the four goals and objectives of this project is to "improve transportation equity". (p. 1-21) Based upon proposed project phasing, transportation equity appears to be the lowest of priorities. A reading of the Highway Traffic Operating Conditions (p. 1-15) indicates that congested traffic conditions with LOS failures occur most frequently in the easternmost areas of the corridor where it is most necessary to "improve corridor mobility" and 'improve corridor travel reliability" – two of the other major goals of the project. Those people most in need of public transit in the most congested area of the City will be served in 2018 while DTS plans an initial huge capital expense from 2009 to 2014 for what amounts to a demonstration project. Reasonable project planning would identify the need for a maintenance facility as a requirement to initiate project construction. DTS appears to have met this requirement by siting the maintenance facility near Pearl Highlands. DTS then proposes to initiate project construction to the west. Good planning practice would dictate that the initial project phases should not simply address land development opportunities, but should address the three other project goals and objectives: improve corridor mobility, improve corridor travel reliability and improve transportation equity. Good planning practice would suggest the following alternative should be considered: • Phase 1 – Leeward Community College to Aloha Stadium • Phase 2 – Aloha Stadium to Kapolana • Phase 3 – Kapolana to Ala Moana • Subsequent phases Expand the Project Phasing discussion. • Discuss how Phases 1 and 2 meet the four goals of the project • Discuss the alternative phasing suggested above and how such phasing would meet the goals of four goals the project • Discuss proposed local and federal expenditure in regards to project phasing • Discuss interim impacts caused by the proposed phasing.	weekday bus trips. The Project also has independent utility because it would connect multiple activity centers, provide cost-effective transit-user benefits, and meet the Purpose and Need for the Project whether or not the planned extensions are provided. Finally, construction of the Project would not preclude future development of the planned extensions. Because of its size, the Project would be constructed in phases to accomplish the following: • Match the anticipated schedule for right-of-way acquisition and utility relocations • Reduce the time that each area will experience traffic and community disturbances • Allow for multiple construction contracts with smaller constract size to promote more competitive bidding • Match the rate of construction to what can be maintained with local workforce and resources • Balance expenditure of funds to minimize borrowing Individual construction phases would be opened as they are completed so that system benefits, even if limited during the first phases, can be realized prior to completion of construction of the entire Project. The temporary effects associated with the interim operations are discussed in Sections 3.5 and 4.16 of this Draft EIS. The Project's cash flow analysis, which is presented in Section 6.4, anticipates the use of Local funds for the first construction phase and a combination of Local and Federal funds for the remaining phases. The Airport & Salt Lake Alternative would include additional construction phases. The section between East Kapolei and Ala Moana Center along Salt Lake Boulevard would be constructed as discussed above, followed by a 2.1-mile connection from the Middle Street Transit Center 'Ewa to the Honolulu International Airport, and finally the section from the airport to Aloha Stadium. The final phases could be completed after 2018. Prior to completion of the section from the airport to Aloha Stadium, the connection to the airport would provide a direct link from the Koko Head terminus of the Project to the airport but would require a transfer at Middle Street for those traveling from the 'Ewa end of the line. It would accommodate the demand for access to the large employment base at and near the airport and provide access for travelers to and from the airport. ***Construction Schedule*** Construction is currently planned to be completed in four overlapping phases of work. Construction activities would be similar for each phase and are described in Appendix C, Construction Approach. The first phase would include construction of the vehicle maintenance and storage facility and a portion of the Project between the Wai'anae end of the Project and Pearl Highlands. The limits of the first phase have been selected so that it can connect to either maintenance and storage facility option because system testing and operation cannot be completed without access to the maintenance and storage facility. Station areas, park-and-ride lots, and the maintenance and storage facility site would function as construction staging areas for the first construction phase. The remainder of the Project likely would be built in three overlapping phases continuing Koko Head from Pearl Highlands, first to Aloha Stadium, then to Middle Street, and finally to Ala Moana Center (Figure 2-43). Construction staging areas for future phases beyond station areas, park-and-ride lots, and the maintenance and storage facility site would be identified and developed by the contractors and approved by the City. Variations to the schedule will continue to be evaluated during Preliminary Engineering. Conceptual design for the Project is under way, and work on the first construction phase is anticipated to begin in 2009 (Figure 2-43). The entire Project is planned to be in operation in 2018.

X	**3**	General-Logical Termini	Please note that per FTA guidance for Environmental Impact and Related Procedures, 23 CFR 771.111(f)(1), the action evaluated in each EIS shall "connect logical termini and be of sufficient length to address environmental matters on a broad scope." The East Kapolei terminus is one mile short of two population centers. It is entirely unclear from the document how East Kapoeli is a logical terminus inasmuch as there is no population or employment there now and it appears that there will be little in the way of population or employment there when Phase 1 is completed in 2013. • Discuss existing land-use for the East Kapoeli area and why this is a logical terminus. • Discuss land-use sector development plans for the East Kapoeli area and why this is a logical terminus.	Per US DOT (FHWA, 1993): "Choosing a corridor of sufficient length to look at all impacts need not preclude staged construction. Therefore, related improvements within a transportation facility should be evaluated as one project, rather than selecting termini based on what is programmed as short range improvements. Construction may then be "staged," or programmed for shorter sections or discrete construction elements as funding permits" Logical termini pertain to the Project, not the construction phases. Following language added to Project Phasing Section The Wai'anae terminus is in the vicinity of the UH West O'ahu campus, Salvation Army Kroc Center, and Ho'opili development, all of which are planned to open between 2009 and 2012.
X	**4**	Preface Pg. i	First paragraph: After "(FTA)", insert "the public and interested parties with the information necessary to make an informed decision, based on a full and open analysis of costs, benefits and environmental impacts of alternatives considered."	OK
C	**5**	Pg. S-1 and 1-19	Purpose and Need: high-capacity transit is stated as the purpose but the ensuing descriptions provide no evidence that there is a transit capacity problem today or in the future. If there is a capacity problem it needs to be better described. It appears that capacity is being used when the issue is mobility improvements. Additionally, the purpose should comport with what is stated in Chapter 7, which contains 4 sections.	Phrase on additional transit capacity added to need. Pg. 1-19
X	**6**	Pg. S-2	2nd paragraph: Briefly define "scoping'.	Added: Scoping is an open process involving the public and other Federal, state, and local agencies to identify the important issues for consideration in the EIS process
X	**7**	Pg. S-4	2nd full paragraph: briefly define "Chapter 343".	Added" the State of Hawaii's environmental impact statement law"
B	**8**	Pg S-4	Transportation: this section should quantify changes in future highway and transit travel times of the no build alternative versus today and the changes due to the build alternatives (which really don't differ compared to each other) versus the no build.	In discussion with Jim Ryan , future highway travel times …
X	**9**	Pg. S-5	First full paragraph, first line: replace "reduce" with "increase".	OK
X	**10**	Pg.S-5	Second full paragraph: insert "somewhat" before "slower" as speeds only deteriorate slightly.	OK
C	**11**	Pg. S-5	Third full paragraph: define "vehicle hours of delay".	Will re-write to remove VHD in this location
C	**12**	Pg. S-5	Fourth full paragraph: it is unclear how the columns will affect transportation facilities. Will lanes be taken, sidewalks eliminated, parking capacity reduced? Some specificity is needed to define the problem.	This is detailed in Chapter 3, Summary will be expanded to address how guideway columns could affect transportation elements.
X	**13**	Pg. 1-7	Delete the last sentence in the green box referencing Honolulu not having a rail system.	OK
X	**14**	Pg. 1-10	Section 1-3, second paragraph: please cite current tourist ridership on transit that provides a context for the statement that there is a tourist market, or if the statement is intended to address the build alternatives, that should be stated more clearly.	Text added to reflect comment: " More than 17,000 transit trips are made by visitors daily."; pg. 1-10 and on pg 1-19
X	**15**	Pg. 1-20,	First full paragraph: "TheBus travel times are projected to increase substantially through 2030". The travel time differences between today and 2030 increase less than 10% which doesn't seem to warrant being characterized as "substantial".	Delete "substantial" from text
X	**16**	Pg. 1-21	Bottom of first full paragraph: "transit capacity" is cited without any prior reference to its relevance. It doesn't seem to have relevance to the purpose of the section to improve transportation equity.	Replacing word "capacity" with "availability"
B	**17**	Chapter 2 – Alternative Analysis	Expand the Project Phasing section. Address all of the issues mentioned above particularly project goals and objectives. Use Summit modeling with the goal in mind of demonstrating user benefits for each subarea.	See Response to comment 2.

X	**18**	Pg. 2-8, Section 2.2.1	Second paragraph: "the No Build Alternative's transit component would include an increase in fleet size to accommodate growth in transit demand and increased congestion, thereby allowing service levels to remain the same as today." It is unclear whether this means that frequencies are increased to accommodate increased demand as a result of expected growth in population and employment, in which case service levels would be increased, or whether it means that frequencies remain the same as today, the fleet size increases due to slower travel times, and there is additional demand for transit but the capacity of the system is the same as today. This should be clarified. We expect the former approach because we assume that is consistent with current policy. In the next paragraph: "Even with fleet expansion, the No Build Alternative would not provide the services necessary to respond to demand." "Response to demand" usually means adequate capacity which suggests the latter explanation above. If frequencies are not increased, the text should explain why this is a reasonable assumption	Text added and presentation re-ordered to address comment (now pg. 2-13): The No Build Alternative's transit component would include an increase in fleet size. However, due to increasing traffic congestion and slower travel times, transit service levels and passenger capacity would remain about the same as today (Table 2-4)
X	**19**	Pg. 2-13	Table 2-4: the 20% spare ratio for buses is consistent with industry practice. However the figure for rail cars is given as 10%. It should be demonstrated/documented that a 10% spare ratio is sufficient to maintain operations at an appropriate level.	Reasonable question, but not an EIS issue No change to EIS, but will address in O&M plan. Short answer is that peak fleet is needed for only short period morning and evening when running with minimum headways. This takes much of fleet out of service much of the day; also, if peak fleet is not available short wait times between trains can help balance demand.
X	**20**	Pg. 2-23	The elevation of stations with mezzanines is cited as 18 feet. The elevation for lower stations without mezzanines should also be cited.	Side-platform stations…its height above the ground, which averages approximately 30 feet to the top of track. See text now on pg.. 2-34
X	**21**	Pg. 2-31	The Bus System section should reference more detailed maps of the bus service illustrating how the bus services will be integrated with the fixed guideway. The figures in this section should have the station names so that references in the text to bus services at stations can be better understood.	Route numbers are added to close-up graphics. Station names added to general bus route maps that follow. See Figures 2-14 through 2-39.
X	**22**	Pg. 2-34	Green insert: the inserts are good ways of conveying information. However using the word "Potential" begs a number of questions. Either delete the word or explain what this means.	Delete "Potential" See Pg. 2-35
X	**23**	Pg. 2-35	Please reference the figure numbers when the maintenance sites are cited.	Figure 2-5 and 2-6 referenced in text. Pg. 2-35
B	**24**	Pg. 2-35	Expand the discussion of environmental impacts of the vehicle maintenance and storage facility and the traction powered substations. Use maps as necessary.	Environmental impacts are addressed in Chapter 4, not Chapter 2. Each discipline being reviewed in Chapter 4 to determine if any impacts were missed.
X	**25**	Pg. 2-36, 2-37	Project phasing and construction schedule sections: Maps with the phases identified would be clarifying. There are 5 phases but only 4 identified in the first paragraph of the construction schedule section. This is a very unusual phasing plan which delays project benefits to the areas in most need instead serving areas that are undeveloped today. An explanation should be provided addressing this concern and the need to build the project contrary to the approach followed by every other project in the US.	Will add map showing each phase. For the EIS, construction phasing has been defined as four phases, with further staged opening of the first construction phase. This approach has been taken because of the magnitude of the overlap of work Ewa of Pearl Highlands. See Figure 2-42
X	**26**	Pg. 3-3	Existing Conditions: Virtually all the data presented is systemwide but the study corridor conditions are only a portion of the system. Either information should be presented that relates to the corridor, or an explanation provided stating how the systemwide information is relevant to the corridor conditions.	Provide information in a call out box on the extent of islandwide travel conditions and demand that is in the study corridor. Page 3-3
	27	Pg. 3-7:	The information on TheBoat service should be updated as the one year demonstration should be over by now	Delete reference to "one-year demonstration project" in text. pg. 3-7
A	**28**	Pg. 3-14	Table 3-7: While LOS is commonly used to describe highway conditions; it is a poor description of what travelers can relate to. Please add travel times between representative origins and destinations for the corridor.	See item 8
X	**29**	Pg. 3-18	VMT, VHT and VHD: It would be useful to spell out the abbreviations and explain what they represent.	Spell out for chapter headings and table titles; there is also a table of Acronyms and Abbreviations on page xvii and the words are defined on page 3-5
X	**30**	Pg. 3-18	Transit Speed section: Information presented on transit speeds is systemwide. Information should be presented similar to that shown on Figure 3-8 and/or Table 7-2. The information in Table 7-2 indicates a slight deterioration of service, which is at variance with the tone of this section. Having more detailed information should allow for a better discussion on how conditions change in the corridor. A similar table showing how highway travel times change for representative origins and destinations should be presented in section 3.3.3.	New table on transit speeds for selected zone pairs is provided on page 3-19.

X	**31**	Pg. 3-19	Transit Ridership section: Reference is made to demand exceeding bus capacity for several routes because of limited road capacity. It is very unusual for circumstances to limit increase in frequencies and the use of larger vehicles to meet capacity. These unusual circumstances, including their location so the relationship to the Build Alternatives is understood, should be explained as that better describes a problem that the Build Alternatives addresses.	Text added to page 3-20: Although some increases in bus services would occur under the No Build Alternative, a review of route-specific demand and service levels for 2030 indicates that bus capacity would be exceeded for several routes. In some cases the demand per bus trip would be more than twice the seating capacity. Adding significant passenger capacity with more buses is not feasible in some key locations along the system, due to roadway capacity constraints. For example, there are only a few streets serving downtown that can be used by buses, and all of those are approaching capacity during peak hours. Lack of signal priority, short blocks and narrow rights-of-way downtown limit the number of new buses that can be added to the system. Outside of downtown, other choke points for buses include the Ala Moana Center area, Waikiki and Pearl City.
X	**32**	Pg. 3-23	Reverse Commute Markets section: This or another section need to address one of the goals of the project which is to better serve rapidly developing areas of the corridor.	Text added to pg. 3-23: The fixed guideway service provided under the Build Alternatives would support and reinforce land use plans associated with O'ahu's planned "second city" in Kapolei. With an almost four-fold increase in employment estimated by 2030 for Kapolei, the quick and direct access provided by the fixed guideway system from PUC Development Plan area locations (e.g., Downtown and Kaka'ako) would help address the demand of future reverse commute markets. These markets include existing and planned local government offices and the future UH West O'ahu campus. Based on transit travel forecasts, about 20 percent of fixed guideway ridership during the a.m. two-hour peak period would be in the 'Ewa-bound direction, which demonstrates that the Project supports the goal of improving access to planned development and a second urban center.
C	**33**	Pg. 3-23	Reverse Commute Markets section, last paragraph: The statement ".. Build Alternatives would support enhanced transportation equity" is made without any connection made earlier to support this statement. Some evidence is needed supporting the use of the Build Alternatives by the markets that this statement targets.	
X	**34**	Pg. 3-23	Transit-Dependent Household section: Information should be presented on the ridership of transit-dependent households on the project as this was cited as a major need.	Graphic (Figure 3-7) added showing how transit system serves areas with high concentrations of transit-dependent households on page 3-25
X	**35**	Pg. 3-24	Transit Speed section, first paragraph: The problem with presenting average systemwide speed information is illustrated again here where the impact of the project on the corridor is understated by averaging its improvements with the system. This figure is misleading and should either be deleted or retained and be described in a way that makes it meaningful.	Text was revised on page 3-24 and a table was added on page 3-19 (this table also addresses comment #30)
X	**36**	Pg. 3-26	Table 3-15: An explanation of the column headings is needed because of the confusion between linked and unlined trips by the public.	Footnote to be added to figure to reflect comment: "Boardings represent the total number of times someone gets on a transit vehicle, whereas a trip can include transfers"' pg. 3-28
X	**37**	Pg. 3-26	Second paragraph: a 2-hr max peak load of 11,950 is cited along with a reference to the system design capacity of 18,000. The capacity cited is the potential capacity with scope beyond what the project would have. The relevant capacity is 6,000/hr per direction as that is what the project will have. Because peak-hour loadings are greater than 50% of the two-hour loadings, it appears that the projected loadings exceed project capacity. This should be explained.	Here is the proposed text, to replace the current paragraph on pg. 3-28: The maximum peak direction (Koko Head) volume during the a.m. two-hour peak period would be about 11,950 passengers in 2030. This is close to the fixed guideway system's currently planned minimum capacity of 12,000 passengers per direction for a two-hour period, making it possible demand could exceed capacity for a short time during the peak period. While this is not anticipated to be a significant problem based on forecast ridership, should higher passenger volumes be realized, the system will be designed to be able to provide substantially higher capacity by adding vehicles or reducing headways. Such operational adjustments would be evaluated as the system approaches the planned capacity toward 2030.

X	**38**	Pg. 3-32	Access to Fixed Guideway section: Given that many of the riders of the Build Alternatives are forecast to access by bus, the number of riders by bus, walk and park-and-ride should be presented	New table on mode of access added to reflect comment. Table appears on page 3-34
X	**39**	Pg 3-32	Transit Reliability section: If many of the riders on the Build Alternatives access by bus, they will be subject to congestion and less reliable travel times for this portion of their trip. That should be discussed.	Text added on pg. 3-34: The bus network would also be restructured to provide access from surrounding communities to the fixed guideway with more frequent bus service. Bus routes serving guideway stations would typically be shorter and would operate in less congested residential communities. These operations would help maintain service reliability compared to operations of longer-distance routes.
C	**40**	Pg. 3-33	Transfers section, third paragraph: Minimal wait times are cited for riders transferring from buses to the project because of its frequent service. The implications of the return trip for these riders should also be described.	Text added on pg. 3-35: Riders transferring from the guideway service to buses would benefit from improved frequencies on existing bus routes serving stations. Also, several new routes with high frequencies would be provided as feeders to the guideway system. Since these routes would primarily operate in residential areas, they would provide greater reliability versus routes operating along congested arterials. Riders transferring from rail-to-bus would also benefit from coordinated transfers between trains and buses thereby minimizing wait times.
X	**41**	Pg. 3-33	Comfort and Convenience section: Our earlier comment on demand exceeding peak capacity contradicts what is said in this section. The section should be eliminated or significantly changed.	Text was revised on pg. 3-35; Reference to standing patrons was deleted; added text pertaining to short wait times, covered waiting areas, and seats
C	**42**	Pg. 3-33	Transit User Benefits section: The description of user benefits gives the impression that this measure is a bureaucratic invention of the federal government that has no relevance to a project, which has two of its objectives as the improvement of mobility (the measure has been referenced in academia for decades). User benefits should be explained as a powerful measure of improved mobility which directly addresses two of the project goals. Information should be developed using the measure to present how the Build Alternatives meet these goals. User benefits are best expressed on a user basis rather than totals.	Text modified on pg. 3-35 to 3-36. Text now references benefits for transit-dependent communities (references Figure 3-7 which also addresses comment 37) and work trips from 'Ewa and Kapolei. All 4 Project goals are addressed. While we agree that in most cases, individual user level information is more pertinent to a reader's perception of a project, we have typically only presented aggregate user benefits (as opposed to "per user" benefits) from SUMMIT. They are developed on the basis of aggregate information about the transportation system. Furthermore, unlike many other types of information, user benefits have little meaning to the average reader and the summary would seem more appropriate as a basis of comparison for the various alternatives. Our discussions with modeling experts also suggest the aggregate approach to be more common.
X	**43**	Pg. 3-42	Initial options for construction staging areas should be provided by the City in each construction package developed. Additional construction staging areas identified and requested by the Contractor should be reviewed and approved by the City.	Text revised on page 3-44: The maintenance and storage facility, park-and-ride lots, and stations could be used for construction staging areas. Additional areas would be identified by the contractor as needed. The contractor would be responsible for obtaining any necessary permits and approvals. Staging areas are not expected to cause a substantial effect.
X	**44**	Pg. 3-43	The City should develop MOT plans typical roadway closures for each roadway identified in Table 3-24. MOT should account for the most critical activity, drilled shaft installation, allowing access operating area for the crane as well as access and operating areas for concrete delivery. The Contractor would be responsible to submit for approval any revisions to the typical MOT plans provided as part of the plan set.	Add text on pg. 3-46: The contractor would be given parameters, such as the number of lanes that could be closed and the procedures for closures, and would develop the MOT Plan accordingly with approval from the City or HDOT. The MOT Plan would address roadway closures for streets identified in Table 3-26.
X	**45**	Pg. 3-43	MOT plans should also address the delivery and unloading of pre-cast guideway sections including crane positioning for unloading.	Add text reflecting comment on pg. 3-47
X	**46**	Pg. 3-44	Consider locations where shoring may be needed; ex. Cantilever sections. Determine effect to both vehicular and pedestrian traffic in areas where additional shoring may be required.	*Add text to end of this section to reflect comment:* Segmented precaste sections will be brought in to avoid the need for substantial shoring or false work. Appendix C describes the general construction process and methods likely to be used in the construction of the Project.; pg. 3-46

X	**47**	Pg. 3-44	Require that pedestrian detours be submitted and approved by the City to ensure that the detours are reasonable for all pedestrian including disabled pedestrians, and that proper deterrents are in place to prevent access (shortcut) through the construction area.	Add text to reflect comment, pg. 3-44 Access to residences and businesses would be maintained during all phases of construction. Bicycle and pedestrian movements would be affected in similar ways as vehicular movements. Pedestrian detours would be submitted and approved by the City to ensure detours are reasonable for all pedestrians, including ADA compliance. Proper deterrents would be in place to prevent access (shortcut) through the construction area.
C	**48**	Pg. 3-45	Table 3-24, There is some concern that there is not sufficient construction work room to maintain roadway access on both sides during foundation installation and overhead guideway construction on the roadways with 2 lanes.	Sufficient space has been provided based on discussion with the contracting community
C	**49**	Pg. 4-12	The Future Land Use Plans and Policies section mentions three statewide and local plans that call for the promotion of transit-supportive development and objectives. Text states that the project is consistent with these local and state transportation plans as well as the land use policies. Note the general comments above on project phasing and logical termini. Expanding on the "'Ewa Development Plan" area in Figure 4-2, and demonstrate through graphics and narrative how project-related TOD would be supported by adopted future land use plans.	The text discussion was expanded to clarify the planned development that is occurring in the Ewa Development Area and clarification was made in the section that the development plan supports transit oriented development. Several of the larger planned developments are included on Figure 4-9. Figure 4-2 was not changed since this figure provides a general overview of the planning areas.
B	**50**	Pg. 4-22, Section 4.3 - ROW Acquisition:	Anticipated construction methodology is further advanced than portrayed in ADEIS. ADEIS may not have adequately addressed temporary construction easements.	Temporary construction easements are not anticipated at the current time and therefore, are not addressed in the DEIS.
C	**51**	Pg. 4-22, Section 4.3 - ROW Acquisition:	Concern over "economic remainder" particularly for properties along Dillingham where partial takes are prevalent. Business owners may claim harm to business or property value as a result. Full takes may then be required.	Text was clarified to explain that if right-of-way changes the function of the commercial property full or partial acquisition was considered. The term "economic remainder" was not added to the text since this is not a term that the public would understand. The statement refers to the Project, not just Dillingham since this situation could occur in other locations. An additional bullet was added to the mitigation section stating that the City would provide relocation advisory services if business was substantially affected.
C	**52**	Pg. 4-33	In the Community Facilities narrative, identify the types of facilities that would be displaced. 1 "what" would be displaced by the project? 14 "what" would be partially acquired?	The text was revised to clarify that 1 church would be displaced and 14 community facilities would be partially acquired.
C	**53**	Pg. 4-36, Section 4.5 Neighborhoods	The intent of this discussion should be to identify adverse impacts on neighborhoods. This section concludes with the determination that there are no adverse effects on any neighborhoods. The most geographically distinct neighborhood – the Banana Patch – would be effectively extirpated by the project. • Discuss the nuances of the Banana Patch neighborhood. • Discuss impacts and propose mitigation.	A brief discussion of the Banana Patch community was added to the Pearl City neighborhood. The Banana Patch community is discussed in more detail in section 4.6 as a community of concern.
A	**54**	Pg. 4-43, Section 4.6 Environmental Justice	On March 28, 2006, FTA HQ, TRO-9, DTS and its consultants had a conference call to discuss the general approach to the environmental justice issue in a majority-minority area such as Oahu. DTS was to "…focus more on linguistically isolated and low-income populations, and secondary assessment analysis to determine communities of concern." FTA also expressed its concern that smaller communities within census tracts could be overlooked. • Using the methodology developed for the evaluation, determine if the Banana Patch community can be defined as a "low-income or minority population." • Discuss the particulars of the Banana Patch community either in the Environmental Justice section. Recall that improving transportation equity is one of the four goals and objectives of the P&N for this project. • Discuss the various project phases in relation to which socio-economic groups will benefit first. Which socio-economic groups will benefit last. • Discuss how spending hundreds of millions of dollars in a green-fields for a demonstration project while the most disadvantaged population has to wait 10 years for improved transit service could be perceived to be an economic justice impact and yet still meets the projects purpose and need.	The Banana Patch community is not a low income or minority community based on the OMPO method used to identify impacts to Environmental Justice populations. However, this neighborhood has been identified as a community of concern as a result of public involvement activities. The City has and will continue to meet with this community to provide them information about the project. This information has been added to Section 4.6 of the DEIS. Comments regarding equity and phasing are addressed in the response to comment 2.

	55	Pg. 4-49	Note that the Alpha Omega Christian Fellowship is in the Banana Patch, a geographically identifiable, isolated (possibly low-income) neighborhood scheduled for demolition. The Banana Patch is an EJ neighborhood.	See 54
C	**56**	Pg. 4-53, Section 4.7 Visual and Aesthetic Conditions:	Along Salt Lake Boulevard, elevated structure will be built in front of multi-story residential buildings. It is not clear that impacts have been adequately addressed.	The text in paragraphs 3 and 4 under the Salt Lake Alternative heading discusses visual impacts for apartments, condominiums and military housing multi-story buildings which include contrasts with residential character, view obstructions, and increased light and glare. The discussion also mentions that impacts would be greatest from fourth and fifth floor windows. The text has been revised to specifically reference multi-story buildings.
C	**57**	Pg. 4-53, Section 4.7 Visual and Aesthetic Conditions	The Mitigation sub-section (p. 4-87) discusses ongoing consultation with the public and local design community as a mitigation measure. This consultation should be formalized in a group of interested stakeholders that meets with some degree of regularity under DTS auspices to discuss design issues. Formally establish a local group made up of interested and members of the public to advise on aspects of project design visual mitigation. The advisory team may include members of neighborhood associations.	Will have community input of station interfaces/design elements, but this will be neighborhood by neighborhood, not using a systemwide design committee. The mitigation section has been revised to state that the RTD will consult with the communities surrounding each station for input on station design elements.
C	**58**	Pg. 4-53 Section 4.7 – Visual impacts	If there are protected viewsheds impacts by the project, they should be identified, and the appropriate agency for consultation and consultation undertaken should be identified	Protected views as defined by County of Honolulu Revised Ordnance, Section 24-1.4 are public views, which include views along streets and highways, mauka-makai view corridors, panoramic and significant landmark views from public places, views of natural features, heritage resources and other landmarks, and view corridors between significant landmarks. The County's General Urban Design Principals and controls state that "Such public views shall be protected by appropriate building heights, setbacks, design and siting controls" and that "These controls shall be determined by the particular needs of each view and applied to public streets and to both public and private structures." The significant protected views that are identified in policy documents such as the Ewa, Central Oahu, and Primary Urban Center development plans are now listed. The text throughout this section has also been revised to call out significant "protected" view impacts. It is noted that these impacts would vary in that viewpoints that are not close to the alignment would generally be less sensitive to changes in the visual environment because they would take in a longer more expansive landscape (visual effects would depend on the viewer's position and location).
B	**59**	Pg. 4-92, Section 4.9 Noise and Vibration	Note that FTA N&V guidance requires that all noise impacts be identified in the DEIS and a list of proposed mitigation measures may be proposed. Adequate mitigation measures must be identified in the FEIS. • Update the N&V Technical Report and send to HQ for review. • Modify the N&V section as follows.	N&V technical report will be updated and send to HQ for review. Get clarification on timing of review and how this affects DEIS release
C	**60**	Pg. 4-93	The ADEIS and the N&V technical documentation incorrectly characterize FTA definition of a "severe" noise impact. The documentation states that "noise mitigation will normally be specified for severe impact areas unless there is no practical method of mitigating noise." Similarly, the description of a "moderate" noise increase does not accurately reflect the intent of language in the FTA's N&V guidance. Please review §3.2.4 of FTA's N&V guidance (2006) and modify language in the document regarding noise mitigation policy considerations.	Section rewritten to : Severe noise impacts are considered significant within the context of NEPA. Severe noise impacts require the evaluation of alternative locations/alignments to avoid sever impacts altogether. If it is not practical to avoid severe impacts by changing the location of the project, mitigation measures must be considered and incorporated in the project unless there are truly extenuating circumstances which prevent it. Moderate noise impacts also require consideration and adoption of mitigation measures when it is reasonable. The mitigation of moderate impacts should consider the predicted increase over existing noise levels, the type and number of noise-sensitive land uses affected, existing outdoor/indoor sound insulation, community views, special protection provided by law and the cost-effectiveness of mitigating noise to more acceptable levels.
C	**61**	Pg. 4-94	Please state that all noise measurements used to determine baseline noise levels in the corridor were taken at ground level. If measurements were taken at elevation, please describe locations and separate ground level background level measurements from elevated measurements. Note that FTA guidance says nothing about "open windows" as being necessary for noise impacts to occur. The presence of a receptor is all that is necessary. Modify the section accordingly.	Will describe where noise measurements were taken to determine baseline noise levels. Will remove any reference to "open windows" and modify section.
C	**62**	Pg. 4-95	No Build Alternative- After the introductory sentence, simply state that no noise impacts are predicted for the No Build Alternative.	Will change No Build Alternative

C	**63**	Pg. 4-95	Mitigation Common to all Alternatives Do not conflate environmental impacts with mitigation. For example, Figures 4-39 through 4-42 imply that noise impacts would be minimal; post-mitigation, this may indeed be the case. However, the purpose of the DEIS is to demonstrate probable impacts. • Clearly demonstrate the noise impacts of the project under Environmental Impacts. • Follow that with a demonstration of possible mitigation measures and demonstrate the degree of mitigation employing those measures. In the Environmental Consequences section, include a table showing: distinct areas of noise impacts; category (1,2 or 3) of receptors; number of impacted receptors; existing noise level; projected project noise level and degree of noise impact (moderate or severe). • Describe elevation of impacts. Use language from the N&V Technical study; first bullet, page S-3 and state, "The LRT and rapid rail technologies would generate severe and moderate noise impacts. The Airport & Salt Lake Alternative with planned extensions employing LRT or rapid rail would result in 399 moderate and 236…etc" In the Environmental Mitigation section, include a table showing: distinct areas of noise impacts after mitigation; category (1, 2 or 3) of receptors; projected project noise level after mitigation and degree of noise impact after mitigation (moderate or severe). • Describe elevation of impacts and type of mitigation. • Modify description of ground-level in other areas of the document (e.g., p. 7-8) as appropriate.	Technical report being re-written to reflect the current project design, including parapet walls and wheel skirts.
C	**64**	Pg. 4-96	Add pertinent language from "Build Alternatives" on page S-4 of the N&V technical doc., "In areas with high rise apartments and hotels…" Note that "…a detailed analysis of the noise barrier design…" must be undertaken as a part of project preliminary engineering and completed as a part of the FEIS process. • Noise impacts to elevated structures must be estimated as part of the DEIS process and appropriate mitigation determined in the FEIS and contained in the ROD. • Remove language about "open windows" and include language reflecting FTA's N&V guidance on adjacent noise receptors.	Will add language from N&V Technical Study. Will remove language about "open windows". FTA's N&V guidance does not use the term "adjacent noise receptors".
C	**65**	Pg. 4-101, Section 4.10 Energy and Electric and Magnetic Fields	Adverse impacts are determined and evaluated in the DEIS. Table 4-17 identifies the location of potential EMF receptors within 200 feet of the project. Determine if EMF will affect any sensitive receptors adjacent to the project.	The 20 sites identified that COULD have equipment that might be affected by project EMF, have now been contacted and one site remains where further review will be needed during Prelimianry Engineering.
C	**66**	Pg. 4-103, Section 4.11 – Hazardous Waste and Material	ADEIS assumes Navy Drum property for potential VMF site will be mitigated prior to use for project. However, given significant amount of earthwork that will be required, this is an unsound assumption. Greater clarity on the environmental status/mitigation of hazardous waste for the Navy property proposed for the maintenance facility should be added.	Added reference to 2000 report and findings that site is clean
B	**67**	Pg. 4-121, Section 4.13 Water	There is no discussion of the determination of jurisdictional wetlands. Information should be developed that includes a formal jurisdictional delineation of wetlands, functional assessment of those wetlands and mitigation proposals. DTS submits a permit to the USACE, which initiates a public comment period, and notifies US EPA of the application. US EPA reviews the application and has the authority to deny a permit. • Discuss in the DEIS wetlands delineation. Assess wetlands function. Notify ASACE of your wetlands determination. • In the event of sufficient wetlands impact, DTS must apply for a 404 Permit prior to completion of the FEIS.	Letter sent to COE with technical report asking for JD. Will reference letter and add to Appendix D. In the research for the DEIS, wetlands in the project corridor were assessed and their functions and values evaluated using the 1987 Wetlands Delineation Maunal. No impacts to wetlands are expected as much of the area is urban and previously existing wetlands destroyed or severely degraded. We have received a Jurisdictional Determination letter from the USACE (Sept 16, 2008). A reply has been send to them addressing their comments and asking for concurrence that the project will not impact any wetlands. If it is determined that there will be a sufficient wetland impact, we will apply for a 404 permit prior to completing the FEIS.

A	**68**	Pg. 4-131, section 4.15 Archeological , Cultural and Historic Resources	General comment: A review of the Historic Resources Technical Report (Section 2.2 Coordination to Date) reveals that while DTS has been in contact with SHPD staff and SHPD staff have visited the alignment, there is no indication that SHPD has agreed with either the methodology used by DTS to determine historic significance or integrity or that SHPD has agreed to the extent of the APE. The purpose of the DEIS is to, at the very least, determine eligibility of resources. While an effects determination can be made during FEIS preparation, eligibility and preliminary effects determination must be made by the SHPD for DEIS circulation.	Have APE letter, added the reference and add letter to appendix D. Eligibility letter on the way from SHPD. Proposed effects have been shared with SHPD. The inventory of affected historic resources will be finalized following receipt of the Determination of Effect from SHPD.
C	**69**	Pg. 4-142	Consider providing interim NTPs and milestones within each construction contract to control the work phase for each contract. In essence, limiting the number of areas a contractor can simultaneously work in.	Not in DEIS
C	**70**	Pg. 4-142	4.16 Construction Phase Effects: Add language: "As a pre-construction activity, DTS commits to requiring its project contractor to create and carry out a Construction Noise and Vibration Mitigation Plan using mitigation strategies to be defined in the FEIS and committed to in the Record of Decision. The plan will be developed with the active participation of all of the affected municipalities. Construction noise and vibration monitors may be included as a part of this plan."	OK
C	**71**	Pg. 4-142, Section 4.16 - Construction Phase Affects:	There will be significant impacts (access to business, traffic, noise) along Dillingham Boulevard due to construction activity. The ADEIS provides general mitigations but will need to be substantially augmented. For example, if I am a business owner along the corridor, the ADEIS does not provide sufficient detail to adequately address my concerns regarding access for delivery and customers.	Significant, certainly require mitigation , but businesses will be kept open and access provided. Review and expand discussion, refer to chapter 3
C	**72**	Pg. 4-142, Section 4.16 - Construction Phase Affects:	Utility impacts and required easements appear to be greater than portrayed in ADEIS	Will add utility coordination info received from design team.
C	**73**	Utilities (general)	Relocation of overhead utilities has been addressed for construction and normal operation. However, there is concern that sufficient clearance has been planned for maintenance of way, service of transit vehicles, emergency service access, and utility company access due to the close proximity of the overhead utility lines	Will add wording and review with design team
C	**74**	Pg. 4-145	Limiting the areas where construction equipment can be used and the length of time equipment remains on a parcel may be of some concern to contractors. Consider requiring the contract to submit mitigation measures for noise sensitive areas, ex. Noise blankets, etc.	OK
C	**75**	Pg. 4-145	Temporary barrier walls should be required around schools, parks and recreational areas in an effort to keep kids out of the construction area.	Will add temporary barrier walls or fences…
C	**76**	Pg. 4-145	Consider limiting the times that construction lighting can be used in residential areas.	OK
C	77	Pg. 4-147	Vibration – Consider having the Contractor perform a video survey of the immediate area prior to the start of any construction activity where vibration levels may be high enough to effect surrounding structures.	OK
C	**78**	Pg. 4-163, Section 4.18 Anticipated Permits and Approvals	Be sure that NPS (Washington DC office) receives a copy of the DEIS.	Will add to distribution list.
C	**79**	Pg. 5-11	In the case of Ke'ehi Park Lagoon, the view of the City Department of Parks and Recreation (DPR) not withstanding, FTA would not agree that the impacts here are *de minimis*. If the applicants were willing to demonstrate that they rigorously reviewed other possible alternatives to the Ke'ehi Park alignment, FTA might be willing to approve the alignment based upon 23 CFR 774.3 (a) (1) and (2). In addition, as mitigation, the applicant's would be required to demonstrate that they have adequately compensated the DPR for its lost resource. • Demonstrate that there are no prudent and feasible avoidance alternatives to the use of the Ke'ehi Park lagoon property. • Demonstrate that DTS has carried out all possible planning to minimize harm to the property.	Have treated as a use, and provided avoidance discussion, with new figure. Also included a Least Overall Harm discussion in Section 5.7, since the alternatives now vary in 4(f) uses.

C	**80**	Pg. 5-13	Include photos of 106 and 4(f) resources with adverse effects. When the SHPD completes his adverse effects determination, add photos and narrative as necessary.	Have added photos of the adversely affected. Additional narrative will come in the FEIS.
A	**81**	Pg. 5-20	The proposed Downtown Station landing adjacent to the Dillingham Building is not acceptable for two reasons. First it increases the negative impacts to the Dillingham building which already suffers visual impacts, and secondly it completely changes the character of a unique urban space turning it from an urban refuge to a high capacity pedestrian passageway. FTA recommends moving the station landing to Alakea Street	Avoidance alternatives now discuss the Alakea Street alternative, as well as Bishop and Fort streets. Figure updated to reflect new discussion.
B	**82**	Pg. 5-20	On the issue of "constructive use"; in the discussion of 4(f) impacts on the Dillingham Building there is no mention of this type of impacts yet it is clear that a massive elevated structure several feet away from an historic building constitutes a visual impact. In the absence of "constructive use" would you say that this constitutes a direct use?	By 23 CFR 774.15, constructive use does not occur when a transportation facility incorporates land from a 4(f) resource, which has been identified for the Dillingham Building parcel. I have clarified this in Section 5.5, with quotes from the regulations, rather than paraphrases. The new Section 5.5 text acknowledges adverse visual impact here, and indicates that Section 106 consultation has focused on visual impacts.
B	**83**	Pg. 5-21	After thoroughly reviewing Section 5 and seeing the proposed project corridor, it is inconceivable that no "constructive use" impacts are identified, particularly those impacts related to impairment of aesthetic features. As with the Banana Patch neighborhood, this raises the issue of a possible "blind-eye" approach to the entire 4(f) analysis regarding constructive use. Relative to aesthetic impairment and ecological intrusion, these are more qualitative constructs than N&V impacts and obvious access restrictions. Nevertheless, the constructive use issue needs to be addressed seriously in the document. In "constructive use" discussion on page 5-22, the author's state that, "changes in the views of (Neal S. Blaisdell and Mother Waldron Parks) would not constitute (visual) impacts so severe as to substantially alter recreation use of the properties." This sentence demonstrates a misunderstanding of "constructive use" as it relates to aesthetic impairment of a 4(f) resource. Proper evaluation of a visual impairment requires a degree of delicacy not apparent in the discussion of this section. Constructive use may imply passive degradation as well as active alteration. Please read 23 CFR 774.15 Constructive Use Determinations. • Go back to the drawing boards on "constructive use" and become familiar with "visual intrusion as substantial impairment". • In a table, describe possible conditions of "constructive use" for each 4(f) property. • Include a high resolution map of all adjacent 4(f) properties with particular emphasis on the parks and the parks functional use.	Section 5.5 re-written to detail our considerations of constructive use more thoroughly. This includes a new table to list the parks and their uses, and a matrix evaluating every kind of constructive use, by each park. The text has been augmented to consider visual impairment at length, with photographs added to help the evaluation.
B	**84**	Pg. 5-21	The first sentence of the Constructive Use section mischaracterizes the definition of "constructive use." The rest of the paragraph is a tautological construct that eliminates the possibility of "constructive use" in this project. Please allow other interested parties to weigh in on no effect and no adverse effect questions. • Redefine "constructive use" • Use the words "substantial impairment" when discussing "constructive use", not "severe impacts" or "alteration."	This has been re-written to quote directly from 23 CFR 774.15(a) regarding use and constructive use, and from 23 CFR 774.15(f)1 regarding No Adverse Effect determinations. The rest of edit uses the phrasing as requested. The matrix added above quotes directly from the regulations.
C	**85**	Pg. 6-4	FTA Section 5309 New Starts section: At the end of the paragraph insert: "FTA has agreed to consider a funding request of $1.2 billion, but has not been approached regarding a higher level."	OK
B	**86**	Pg. 6-10, section 6.5.1:	The last sentence of the first paragraph leaves the reader with the impression that contingencies should cover any unforeseen conditions. This is a surprising statement given that most projects at this stage of their development have many unknowns and no such assurance can usually be given. However, if this project has taken extraordinary measures to guarantee a low risk of cost overruns in contrast to the experience of mega-projects elsewhere, then the measures should be described to lend credibility to the claim. The findings from the cost review currently being conducted by FTA's contractor should be used in this section.	The last sentence in the paragraph will be removed. Comments from the PMOC regarding the capital costs and risk assessment will be incorporated in the FEIS as appropriate.
B	**87**	Pg. 6-10	Changes in Project Schedule: This section dismisses the possibility of delays in the project schedule. Findings from FTA's contractor review of the project should be included and addressed in this section and a realistic assessment of schedule delays described.	Findings from FTA's contractor will be incorporated into the FEIS as appropriate.
C	**88**	Pg. 6-10	Operating Cost Increases: This section should be revised once the O&M costs are revised to be consistent with FTA guidance.	Section will be revised to reflect results from an updated O&M Cost Model

C	**89**	Pg. 6-11, Section 6.5.3:	At the end of the first paragraph insert "While FTA has agreed to consider a funding request of $1.2 billion, the agency has not been approached to consider the $1.4 billion necessary for Airport Alternative. Should FTA deny funding in excess of 1.2 billion, local funding would be necessary."	OK
A	**90**	Pg. 6-11	Fare Policy and Ridership: there are no specifics in this piece. For example, there are some real risks given the huge increase in transfer rate.	Need explanation of comment. The total number of transit linked trips rises.
C	**91**	Chapter 7	A conclusion for each of the 4 sections on needs is that there is an insignificant difference among the 3 build alternatives – that should be stated. The last paragraph of section 7.1.3 should probably be deleted as it doesn't accurately describe FTA's evaluation.	Adding summary sentence of "The Build Alternatives would substantially improve corridor mobility compared to the No Build Alternative. Differences between the Build Alternatives would be small" and similar for other metrics Reference to FTA ratings process deleted.
C	**92**	Pg. 7-8, Section 7.3	Second paragraph, first line: Insert "Cost effectiveness is one of the key criteria that …."	OK
C	**93**	Pg 7-9	Third sentence: after "ratings" insert "which is currently required to qualify for New Starts funding. Other considerations also apply. However, FTA has not completed its review of the estimates made for the operating and maintenance costs, capital costs or user benefits for the Build alternatives. The reviews could change the cost effectiveness rating. If the reviews result in insignificant changes to these estimates and the estimates hold up through subsequent phases of project development, along with a number of other FTA considerations…"	The following will be added: The cost-effectiveness indices for the Build Alternatives compared to the baseline fall within the "medium" range established by FTA for its New Starts ratings, which, along with other considerations, is currently required to qualify for New Starts funding. Thus, if these results hold up through subsequent phases of project development, along with other FTA considerations, the Project would be in the competitive range for funding consideration.
B	**94**	Chapter 07 Evaluation of Alternatives	Fully discuss the TSM alternative in this chapter. Please note that DTS Summit modeling and associated ridership and user benefits information has not been reviewed and approved by FTA. Important: when discussing such ridership benefits, particularly in tables or graphics, note for the record that "FTA has not reviewed or approved this ridership data."	Reference should be to description of the baseline alternative, not the TSM alternative that was evaluated in AA, correct? There have been changes. FTA has reviewed. Need to discuss language. FTA has reviewed the SUMMIT Modeling and ridership information used in the Admin Draft EIS.
C	**95**	Pg. 7-4	In the discussion on improving access to planned development, discuss travel time savings in the East Kapolei to West Loch segment as a percentage of total project travel time savings. Discuss travel time savings of park-and-ride patrons. • Use Summit modeling to identify how transit trips and user benefits meet the goal of supporting planned development. In the discussion on improving transportation equity, equity is described as "a fair distribution of the project's benefits and impacts." Improving equity can also imply remedial justice in the form of delivering a larger share of benefits to disadvantaged populations. In the discussion on improving transportation equity, discuss travel time savings in the Aloha Stadium to Ala Moana segments as a percentage of total project travel time savings. Identify "community of concern" as transit-dependant population. • Discuss access by transit dependant populations as "walking distance" to stations. Use Summit modeling to identify how transit trips and user benefits meet the goal of improving equity for transit-dependant populations.	Text in Chapter 3 is being revised to more comprehensively address the equity and access to new development goals. The "walking distance" is not a fair surrogate for "transit dependent". Most transit dependents are able to access the stations using the supporting bus system.
B	**96**	Pg. 7-6	Remove this "island-wide" user benefits map. It is inaccurate and misleading. Remove discussion of benefits to "island-wide" population. FTA discusses "user benefits" in a defined transportation corridor. User benefits outside the defined ridership area are typically discounted. • Employ a user benefit map of the corridor proper. • Use standard Summit modeling to display user benefits.	Island is a unified transit system. Users well outside of the corridor see substantial user benefit improvements because of express bus connection to the system. Island-wide data demonstrates that service is not being stolen from other users.
C	**97**	Pg. 7-9	Table 7-7 is misleading. "Dollars per hour" should be relabeled "cost per hour of transportation system user benefits."	OK
C	**98**	Chapter 8 Public Hearings	One formal public hearing on the DEIS should be held in the Banana Patch neighborhood. Coordination with FTA should occur in case FTA staff feels FTA attendance is necessary.	A hearing is proposed nearby. No facilities are available within the H-1/H-2/Kamehameha highway interchange area ("Banana Patch").

Key:
A = Advice needed to uderstand comment, first priority
B = Basic understadning of issue, need to confirm approach

C = Concept complete, need to finish revision
X = Addressed